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Staff Paper

2012 ANNUAL
AGRICULTURAL OUTLOOK

Coordinated by
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Staff Paper 2012-02 **January 2012**

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2012 Annual Agricultural Outlook

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35 pages

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THE GENERAL ECONOMY
Robert Myers

U.S. GDP growth came in at 2.8% for the fourth quarter of 2011, up from 1.8% in the third quarter. Although slightly below the 3% economists had been expecting, the 2.8% number confirmed the general consensus that the U.S. economy picked up some steam in the latter part of 2011. Two other factors have added to recent optimism. First, stock prices have risen sharply during January 2012, with the S&P 500 up about 6% year-to-date at the time of writing. These returns have been based on solid company earnings as well as improved growth prospects for the U.S. economy. Second, housing data indicate new construction of single family homes rose 4.4% in December 2011 to the highest rate observed since April 2010, while existing home sales also increased 5% to their highest reading since May 2010. Many economists view a recovery in the housing sector as a key prerequisite for sustained stronger growth in the U.S. economy, though few would argue we are out of the woods on housing yet.

Credit market conditions have improved and borrowers with collateral and sound balance sheets are getting better access to finance at historically low interest rates. And based on recent statements from the Federal Reserve, this low interest rate environment is expected to continue well into 2013. Unfortunately, however, labor market conditions have improved only gradually. The unemployment rate ticked down to 8.5% in December 2011 and new jobs are being created (an estimated 297,000 new jobs from November to December 2011). But while the labor market is moving in the right direction, the 8.5% unemployment rate compares to a historical average of only 5.7% between 1948 and 2010, so we still have a long way to go to get back to where we have been historically. The glacial rate of improvement in labor market conditions is one of the strongest drags on U.S. economic performance.

Consumer confidence in the U.S. has remained stubbornly low, which is a real problem because consumer spending has been estimated to contribute about 70% of total economic growth in recent years. Low consumer confidence is due to weak labor market conditions and the decline of U.S. real estate prices (which lowers consumer wealth), but concerns about the sovereign debt and banking crises in Europe have also weighed on consumer nerves. The fear is that the contagion effects of a Greek debt default (which is looking more and more like a real possibility) will be felt throughout the European banking sector, and could lead to a severe recession in Europe which would then spread to its trading partners (including the U.S.). Recent signs of a possible slowdown in the Chinese growth machine are another risk to the U.S. economic recovery.

Fortunately, many economists are starting to see signs of an “economic decoupling” from concerns about Europe and China as consumers, and especially investors, focus more on the growing internal health of the U.S. economy. But even looking inward there are signs of possible trouble ahead. Chief among them is the size of the U.S. budget deficit and the apparent intractability of attempts to reduce it. Any signs of a “meeting of the minds” in Congress about how to tackle the deficit problem could significantly improve consumer and investor confidence, and help get the U.S. economy growing at a faster clip. Given all of these internal and external risks, U.S. GDP growth is only forecast to be around 1.8% in 2012, which is generally considered to be insufficient to bring about a significant decrease in the unemployment rate. As such, we appear to be in for another year of “moderate” growth and macroeconomic performance.

One good piece of news is that the performance of the Michigan economy has improved over the past year. A recovery in the manufacturing sector, particularly in auto production, has improved income and employment prospects. The agricultural sector has been another strong performer. Despite these steps in the right direction, the Michigan unemployment rate is forecast to be 10.3% in 2012, which is still well above the U.S average forecast of 8.5%. Furthermore, while there has been job growth, much of the forecast decline in the Michigan unemployment rate is expected to be a result of workers leaving the state for locations with better job prospects. So while the recovery in manufacturing is a welcome respite, future growth prospects for the Michigan economy appear to continue to depend on the service sector and diversification into the “knowledge-based economy.”

POLICY OUTLOOK
David B. Schweikhardt

The policy outlook for 2012 will be dominated by the upcoming farm bill debate. The 2008 farm bill will expire in September 2012, and is subject to renewal. At the same time, the state of the general economy and macroeconomic policy (monetary policy, fiscal policy, and issues related to the federal deficit) will loom over all U.S. political discussions in 2012. Far behind these two issues will be issues related to trade policy. All political decisions, including the timing of their resolution, will be made against the backdrop of the 2012 election. Thus, Michigan farmers should be prepared for a wide variety of scenarios in which policy decisions could be made rapidly (for example, in an attempt to resolve farm bill issues before they become further dominated by budget concerns) or excruciatingly slowly (if, for example, farm bill deliberations bog down over budget issues or political divisions and the 2008 farm bill is extended for another year).

2012 Farm Bill Debate

The 2012 farm bill debate will be dominated by two major issues. First, what changes in commodity programs should be made? Second, what will be the implications of the federal budget deficit for the entire range of USDA programs included in the farm bill? The major issues in the design of commodity programs will be (a) whether the existing program (the Direct and Countercyclical Program) meets the risk management needs of farmers and (b) whether commodity programs can be operated in a meaningful manner within smaller budget expenditure.

The Direct and Countercyclical Program (DCP) has two components. First, the direct payment is made to producers each year, regardless of the market price received by producers. Second, the countercyclical payment is made only if the market price for that year, minus the direct payment, is less than the target price. Given the existing target prices (for example, $2.63 for corn); no countercyclical payments have been made during the 2008 farm bill. On the other hand, despite the historically high levels of commodity prices since 2008, producers have continued to receive direct payments (for example, 28 cents for corn).

Given the transformation of commodity markets and prices in the past decade, the question must be asked: How can the DCP provide meaningful price or yield risk protection with target prices so far below market prices? In particular, the DCP provides no price risk protection at any price below $2.35 for corn (for example, $2.63 minus 0.28). Thus, at today's market prices, the DCP provides virtually no price risk protection for producers. Because the DCP is calculated using a historical crop base acreage and a historical farm yield, it does not provide any form of yield risk protection at any time. Finally, the continuation of direct payments, at a time of historically high prices and budget stress, raises a variety of concerns about the equity of direct payments.

The 2008 farm bill also provided the option for producers to enroll in the Average Crop Revenue Election (ACRE) program. Producers who chose to enroll in the ACRE program were required to forego 20% of the direct payments, all countercyclical payments, and 30% of the marketing assistance loan rates. In exchange, producers were eligible for a revenue-based payment (where revenue = market price X yield). This payment was based on benchmark farm revenue per acre, actual farm revenue, benchmark state revenue per acre, and actual state revenue. If the benchmark revenue was greater than the actual revenue in both the state and

the farm comparison, then the producer was eligible for an ACRE payment based on the difference between the state benchmark revenue and the state actual revenue. The prices used in the revenue benchmark measures were the national average market price of the two most recent crop years. The yields used to calculate the benchmark measures were a three-year average (using three of the most recent five years, excluding the high and low year).

Two forces are pushing this issue to the front of the farm bill debate in 2012. First, budget cost limitations and equity issues are causing the direct payment portion of the DCP to be called into question. Second, given the relatively low level of target prices under DCP, the program no longer provides any significant level of risk protection for either prices or yields. Indeed, these two issues intersect with regard to the direct payment portion of the DCP. Given existing price levels, the direct payment portion of the DCP is now nothing more than an income transfer from taxpayers to farmers (or, more likely, non-farm landlords), with little justification based on societal concerns about equity or farmers' concerns about risk management.

Given these growing criticisms of direct payments, several major agricultural organizations have proposed a variety of "ACRE-like" programs for the 2012 farm bill. These proposals vary widely in their details and cannot be discussed at length in this article. Virtually all of these proposals, however, are based on several very similar components. First, most of these proposals are based on the philosophy that U.S. farm programs should be based on a risk management (include price and yield risk) approach rather than an income transfer approach. Second, most of these proposals are based on the notion that an effective risk management program must be able to respond to both "systemic" risk (such as the risk that the national price of a commodity will decrease for all producers as a result of an unexpected decrease in export demand) and "idiosyncratic" risk (such as the risk that the a particular crop on a particular farm will fail due to weather risk). Third, these proposals rely on a combination of an ACRE-like program and an effective crop insurance program to provide producers with a full set of risk management tools. Fourth, each of the proposals relies on an ACRE-like payment that would be based on a comparison of benchmark and actual revenue at the farm level and a higher level.

Differences in these proposals arise in such details as the prices or yields used in the revenue calculations or in the "higher level" that will be used to determine when payments will be made. For example, the ACRE program in the 2008 bill used a "farm trigger" (the farm's actual revenue compared to the farm's benchmark revenue) and a "state trigger" (the state's actual revenue compared to the state's benchmark revenue). Under the ACRE program, both triggers must occur (the actual revenue at each level must be less than the benchmark revenue) for an individual farm to receive an ACRE payment. The proposals made for the 2012 bill, have a wide variety of "higher level" triggers, such as triggers at the county level or at the crop reporting district level.

The key to the outcome of this issue will be budget cost. If the trigger is moved from a higher level to a lower level (such as moving from the state level to the crop reporting district level to the county level), then the budget cost of the program will increase. This is because each step downward in the trigger level will cause the program to "absorb" a greater share of the risk that occurs in the trigger region. In essence, the program would be covering more risks as the trigger level decreases, so the budget cost required to pay for the program would increase. Studies of the existing program and of some of the proposed programs suggest that the cost of using a county level trigger may be beyond the budget resources available to the agriculture committees. Triggers at higher levels appear to within the available budget

resources. Much will depend on the exact details that would be included in the calculation of revenues and in other factors.

At the same time, it should be noted that the role of crop insurance is also critical to this debate. In the past decade, a "quiet revolution" has occurred in U.S. agricultural policy. The U.S. now spends substantially more on crop insurance than it does on commodity programs. This change has gone largely unnoticed, but is a critical consideration in the future of farm programs. First, this change is a significant step toward making U.S. farm programs more "market oriented." Second, this change also suggests that careful thought must be given to the expenditure of the scarce budget dollars available for the farm bill. If the purpose of farm programs is risk management tools that producers cannot acquire without such support, then would those scarce dollars be better spent (in a risk management sense) on moving an ACRE-like trigger to a lower level or on an effective crop insurance program? Though such tradeoffs may be unpleasant to consider, that could very well be the central issue of the 2012 farm bill debate related to commodity and crop insurance programs.

Trade Policy Issues

At the present time, the trade policy agenda is expected to be very limited in 2012. The Obama administration is committed to completing the Doha Round of WTO negotiations, but progress appears minimal at this time. With the Congressional approval of bilateral trade agreements with South Korea, Colombia, and Panama, there are few to no other bilateral trade agreements in sight for 2012. Such action is likely to depend on the outcome of the 2012 elections.

To the extent that trade policy becomes an issue in 2012, it is likely to come in an indirect and ad hoc manner. In particular, as the recession drags on, and as countries are reluctant to use monetary or fiscal policy as an economic stimulus, nations are likely to turn to other methods of "solving" their unemployment problems. First, with nowhere left to turn, nations could seek to "export" their unemployment by using currency manipulation (deliberate depreciation of their exchange rate) to stimulate exports and export-related employment, thereby shifting their unemployment to other nations. Second, if currency manipulation fails to achieve reduced unemployment, nations may turn to more protectionist measures to stimulate domestic employment.

In particular, many nations charge "effective" (or actual) import tariff rates that are well below their "bound" import tariff rates (a nation's bound tariff rate is the maximum tariff rate that it is permitted to charge under the rules of WTO). A major objective in the Doha Round of WTO negotiations was to address this issue by reducing countries' bound tariffs to their effective tariffs, thereby preventing arbitrary increases in the tariffs charged. With the collapse of the Doha Round negotiations, however, this issue has not been addressed and countries are within their WTO rights to increase their tariffs on imports to the bound rate at any time. Whether this issue will move to the forefront in 2012 is unclear at this time. If the worldwide recession and slow recovery drag on past 2012, as is very likely to occur, this issue will be increasingly likely to arise.

Outlook for 2012

The policy outlook is likely to be frustrating in 2012. On the one hand, decisions could be made rapidly if policymakers see an opening to pass a favorable farm bill (as was attempted in

2011 under the budget “Super committee” process). On the other hand, farm bill deliberations could drag on due to tight budget limits or to political divisions within Congress. An extension of the 2008, though difficult, would not be out of the question in the prevailing political atmosphere. Two of the last three farm bill debates extended past the end of the year in which they to occur.

Should farmers be ready for a sprint or a marathon? That is, unfortunately, the great unknown. Thus, producers should take advantage of any opportunities that arise to provide input for the 2012 deliberations if they intend to have their policy preferences reflected in the final version of the bill.

2012 INPUT COSTS
Bill Knudson

Commodity prices continue to be strong. It also appears that most input prices have also increased. Fertilizer prices are up from 2011. An increase in the price of oil has put upward pressure on diesel prices. Interest rates will remain low; and credit might be somewhat easier to obtain as farm balance sheets continue to improve.

Fertilizer

Fertilizer prices have increased across the board. Table 1 below shows the retail prices for some typical fertilizers in January 2011 and January 2012.

Table 1. Retail Prices of Selected Fertilizer
January 2011 and January 2012

Fertilizer	January 14, 2011 ($ per ton)	January 13, 2012 ($ per ton)
MAP	698.49	719.26
Potash	568.77	659.87
Urea	488.70	554.16
Anhydrous	728.35	796.17
UAN 28	348.76	390.64

Source: DTN.

Potash prices have increase by about 16%. The price of urea is up by more than 13% compared to 2011. The price of anhydrous ammonia is up by more than 9% and the price of UAN 28 is up by 12%.

There are two things to consider when analyzing these figures. The first is that prices are likely to rise as farmers make their purchases as planting season approaches. The second is that these figures are national figures. Prices in Michigan may vary somewhat.

Seed

Seed prices continue to increase; both Monsanto and DuPont (Pioneer) have announced price increases in the 5% to 10% range. In October 2011, Purdue University estimated the per acre cost of soybean seed to be $62, an increase of 5.1% over the 2011 estimate; the per acre cost of corn seed to be $107, an increase of 8.1% over the 2011 estimate; and the per acre cost of wheat seed to be $41, also an increase of 5.1% over the 2011 estimate.

It should be noted that some seed varieties may be in limited supply if they are available at all. Corn seed supplies are particularly tight.

Fuel

Diesel fuel prices are rising, and could increase more as the year progresses. According to the U.S. Energy Information Administration, the retail price of diesel was $3.72 a gallon in the Midwest in January 2012. This is 41 cents a gallon higher than the previous year. Uncertainty over the situation in Iran is putting upward pressure on prices. If the global economic recovery continues, or for whatever reason there is a disruption in global oil supplies, the price of diesel will increase even more. Conversely, if the world economy enters into a recession, the price of diesel will likely decline.

Interest Rates

Interest rates remained low throughout 2011 and will likely remain low in 2012. Credit conditions might improve somewhat making access to credit easier. According to the Federal Reserve Bank of Chicago, interest rates in the region, which includes the Lower Peninsula, most of Indiana and Illinois, Iowa, and the southern and western part of Wisconsin, were 5.66% for operating loans, and 5.36% for real estate loans in the third quarter of 2011.

Interest rates are likely to remain stable in 2012. While the economic recovery is underway, it remains feeble and the Federal Reserve will continue its expansionary monetary policy until at least the latter part of 2012. Recent activity by the Fed has left interest rates unchanged.

MICHIGN FARMLAND VALUES SOARING AGAIN
Eric Wittenberg and Steve Hanson

Michigan farmland values followed 2010's slight gain with a year of solid growth. Farmland values pushed higher as a result of strong commodity prices and low interest rates. Michigan State University's annual land value survey has been conducted in the spring of each year since 1992 by the Department of Agricultural, Food, and Resource Economics and collects information on the value of different types of land across the state of Michigan. The 2011 survey reported land values increased 7.3% statewide over the previous year. The growth in the market was concentrated in cropland, sugar beet, and irrigated land while land with fruit bearing trees showed some weakness. Average farmland values in spring 2011 were reported to be:

	Southern Lower Peninsula	Michigan
Tiled field crop land	$3,764	$3,472
Non-Tiled field crop land	$3,140	$2,823
Sugar Beet land	$4,345	$4,062
Irrigated land	$4,625	$4,147
Land with fruit trees	$6,909	$6,880

The USDA, in its "Land Values and Cash Rents 2011 Summary," reported Michigan's agricultural cropland prices increased 6.1% to an average price of $3,500 per acre for calendar year 2010. The most recent data on land prices from the Federal Reserve Bank of Chicago found Michigan land prices increased about 16% from October 1, 2010 to October 1, 2011. All other states in the Federal Reserve's Seventh District (Iowa, Wisconsin, Illinois, and Indiana) showed even greater increases, ranging from 17% to 31% during this same reporting period with Iowa showing the largest increase.

According to the 2011 MSU survey, cash rent rates increased significantly across tiled cropland, non-tiled cropland, sugar beet, and irrigated cropland. Cash rents for land in the southern Lower Peninsula and across the entire state averaged double-digit percentage increases over the previous year. Average Michigan cash rent levels in spring 2011 were:

	Southern Lower Peninsula	Michigan
Tiled field crop land	$126 per acre	$117 per acre
Non-Tiled field crop land	$ 95 per acre	$ 85 per acre
Sugar Beet land	$173 per acre	$165 per acre
Irrigated land	$206 per acre	$197 per acre

Fifty-four percent of the crop acres were controlled through leasing arrangements, with 82% of that land leased on a cash rent basis.

These are average rents and they can vary significantly with location, competition, and expected yield. Additional details on land values and cash rents across the state are reported in the Department of Agricultural, Food, and Resource Economics Selected Agricultural Economics Reports that can be found on the web at: http://www.aec.msu.edu/aecreports/index.htm.

Michigan farmland values are influenced by both the agriculture and non-agriculture sectors. Land values are influenced by a combination of factors including the ethanol industry,

commodity markets, interest rates, and commercial and residential development. While Michigan agriculture is very diverse, major commodity crops, along with livestock, continue to play an important role in determining the value of farmland in many areas of the state. Last year the outlook for crop prices and milk prices looked strong which helped push farmland values up. As you will see in the following outlook articles, current economic conditions suggest the outlook for both crop and dairy producer earnings continue to remain very strong.

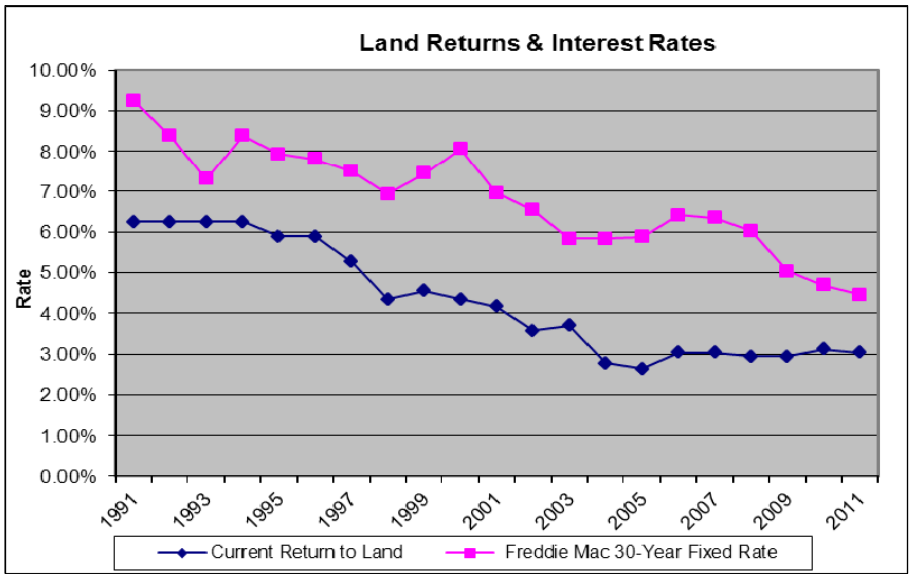
Energy and oil prices have become a major factor impacting agricultural profitability and are affecting land prices in complex ways. The actual impacts are difficult to predict because, while higher energy costs increase the cost of production, they also increase the demand for bio-based fuel alternatives such as ethanol and bio-diesel which could increase demand for agricultural outputs (e.g., corn for ethanol production). At the same time, increased demand for corn and soybeans increases the cost to dairy and livestock producers. While energy prices have dropped from record 2007-08 levels, they still remain historically high with crude oil futures prices currently close to $100 barrel or more. Many investors are anticipating continued acceleration in the recovery of the global economy that will support strong prices for oil and energy.

Interest rates continue to help propel land values. The Federal Reserve has continued to hold the Federal Funds Rate (the interest rate banks charge each other for overnight loans) constant at 3.25%. The Wall Street Journal Prime Rate (the base rate on corporate loans posted by at least 75% of the nation's 30 largest banks) is also currently 3.25%. Interest rates for farm real estate loans have continued to decline to historically low levels. The Federal Reserve Bank of Chicago reports third quarter 2011 real estate loan rates averaged 5.35%. GreenStone Farm Credit Services reports current agricultural real estate loan rates starting at 5.05% for 15-year fixed rate, and 3.80% for one-year adjustable rate loans. The linkage between long-term and short-term interest rates seems to have strengthened as today’s financial markets have moved to relatively lower long-term lending rates. This means the cost to finance land purchases has decreased providing the investment stimulus to purchase farmland real estate. It also means that the return on non-land investments is lower, making land a more attractive investment alternative.

The demand for non-farm agricultural use increased in 2011 as the Michigan economy shows signs of strengthening. The 2011 MSU survey found the average non-agricultural-use value for undeveloped land in Michigan to be $6,174 per acre for residential development and $13,074 per acre for commercial/industrial development - both increases over the previous year. However, the value for recreational development land decreased slightly to $2,518 per acre. Any increase in non-agricultural-use values for land tends to strengthen the demand for farmland in surrounding areas.

Rising commodity prices have helped drive up both profits and land values. But what does this mean for the return on land investments? One way to peek at land return is by looking at the rent-to-value ratio which is a simple way to measure the current rate of return. We can use the MSU survey data to get an idea what the current return to Michigan farmland has been over time. The figure below shows the rent-to-value ratio for tiled cropland in the southern Lower Peninsula since the MSU survey began in 1992. You can see the current return to land has fallen from around 6% in the early 1990s to around 3% today. Also notice that the current return has basically been flat for the last 8 years. So in recent years, land prices have moved with cash rents so that the current rate of return has hovered right around 3%.

We also know that interest rates play an important role in determining land prices. Let's look at what has happened to interest rates over time and see how that compares to changes we've seen in current return to land. The figure below also shows the Freddie Mac 30-year-fixed interest rate since 1992. During the early 1990s, long-term interest rates were around 8%. Like the current return to land, these rates have declined over time and in recent year have fallen below 5% (today they have actually dropped below 4%!). It's worth noting that these rates have fallen roughly the same amount as the current return to land - a little over 3%.



Where are land prices heading this year? Farm income is expected to be strong again in 2012 and many farmers have significant liquidity positions (cash). Interest rates are also expected to continue at the current historically low levels. Unless we experience some surprises in farm income or interest rates, Michigan agricultural land values are likely to show strength again during 2012. The value of quality land in good locations will likely continue its upward movement in most markets. Agricultural producers and outside investors will likely continue to focus on the quality and location factors continuing to put upward pressure on "good" farm land in prime locations.

2012 ANNUAL CROPS OUTLOOK
Jim Hilker

CORN

The 2012 Annual Corn Outlook presented here will include parts of the 2011-12 and 2012-13 corn marketing years; the baseline numbers are presented in Table 1. By baseline, I mean given what I know and expect to date, we all know a lot can and will happen to change these expectations. We are in our second year of both U.S and world tight corn/feed grain stocks and it does not appear the situation will change much in 2012-13 if we have a trend yield or below for the 2012 corn crop. This is despite the world having a record 2011-12 corn crop, even with the U.S. having below par corn production.

There is every reason to believe that the price volatility that we have seen in the corn markets since fall of 2006 will continue. How the debt crisis in Europe turns out, world GDP growth or lack thereof, oil/gas prices, U.S. and world weather, etc., etc., will all play a role due to a large degree of all being unknowns. At this point, the market is projecting an 80% chance that December 2012 futures will be between $3.60 and $7.60 per bushel.

2011-12

U.S. Corn producers planted 91.9 million acres of corn for the 2011 crop, the second highest on record after the 93.5 million acres planted in 2007. Acres harvested for grain came in at 84 million acres. The 2011 planting season started off okay, but soon turned very wet for much of the Corn Belt; late plantings were the norm for nearly half the corn plantings. And, there were prevented planting acres. A lot of corn was planted in June, especially in the eastern portion of the Corn Belt. The growing weather for different areas of the Corn Belt varied over the growing season, large areas turning dry by mid-summer, with other areas getting nice rains. Luckily most of the Corn Belt did not have an early freeze given the late plantings, although a few areas did.

In the end, the average corn yield for the U.S. was 147.2 bushels per acre. This was about 10 bushels per acre, 6%, below the long-term trend yield. When multiplied by the 84 million harvested acres, gave us total corn production of 12.36 billion bushels, the fourth largest on record. However, it was 800 million to 1.2 billion bushels less than expected, given different assumptions on the expected yield at the time of planting.

Michigan planted 2.5 million acres, 100,000 acres more the 2010, and the second highest on record behind the 2.65 million acres planted in the drought year of 2007. Michigan harvested for grain acres were 2.19 million, up 90,000 acres from the previous year. Michigan recorded a record yield for the third year in a row at 153 bushels per acre, three bushels higher than last year's record yield. These two figures allowed Michigan to set a record for corn production at 335 million bushels, 20 million more bushels than last year's record corn production.

On the use side, there is not a lot of room to move. As seen in Table 1, ending stocks are only expected to be a very tight 846 million bushels, 6.7% of use. That means several things. One, total use is pretty much known, we only have so much corn and demand is strong, meaning the market will likely use all it can, but price will move to whatever level necessary to keep stocks at about the forecast level. What's less clear is how the use will be divided up,

given the different factors that could change as we go through the remainder of the marketing year. And, whenever stocks are tight, it only takes minor changes to cause big price changes.

Feed use is expected to be 4,600 million bushels, 4% below last year. While we have a lot of cattle on feed now that will come to market over the next few months, placements and marketings will soon drop off, as there are just not a lot of cattle available for placement, meaning lower total cattle numbers being fed for the year. Hog production is expected to be up a little as will be discussed in the hog outlook. A wild card in the market is slaughter weights of both cattle and hogs; the price of corn versus the market price for livestock could shift final use for corn 50 million bushels in either direction. Often 50 million bushels doesn't mean a lot, but when projected ending stocks are only 846 million bushels, it becomes significant.

Then we have food, seed, and industrial uses. While I expect seed use to be up a couple million bushels as I expect more planted corn acres next year, corn used for food and industrial uses other than ethanol are expected to remain about level. The 5.0 billion bushels of corn projected to be used for ethanol is 21 million bushels less than last year, but still above the mandated level. A profitable fall has 2012-13 ethanol production off to a good start, but returns are now closer to total costs and week-to-week production is expected to fall off; if not, the projection is too low. This forecast is based on oil/gas prices relative to corn prices staying in the same range they now are, that is a huge assumption. Again, it would not take much of a change in this projection to keep corn prices hopping. Will we hit blending walls periodically as we go through the year? It has helped that the world sugar price is high and Brazil is not exporting ethanol at levels seen in the past, in fact the U.S. is exporting significant amounts of ethanol. In total, U.S. domestic use is expected to drop 215 million bushels in 2011-12 versus 2010-11.

Exports in 2011-12 are expected to fall way short of a year ago as shown on Table 1. The biggest reason for the projected decrease in U.S. exports is we don't really have any more to export without cutting into some other use. However, if the Argentina corn crop continues to shrink, there will be pressure. The large world wheat supplies are also playing a role, as wheat is being priced as a feed grain. The world corn crop and world coarse grain crops in total achieved record levels, even with U.S. production being down. Despite the record world coarse grain crop, due to strong world demand, the projected 2011-12 world stocks-to-use ratio will be the tightest since at least the early 1970's at 14.1%, or another way of putting it, about seven weeks of use. Last year, it was 14.7%, and it was 17.5% of use for the 2009-10 marketing year.

When you add domestic use and exports you have total use, and it is expected to be down 400 million bushels. However, given total supply is down 680 million bushels, projected ending stocks for 2011-12 are significantly tighter than for 2010-11. Ending stocks are projected to be 846 million bushels, only 6.7% of use. The only other time in my data that ending stocks as a percent of use were tighter was the 5% in the 1995-96 marketing year, and most of us remember that year. The projected 2011-12 price of $6.20 is a weighted annual average price.

2012-13

My projections for the 2012-13 corn marketing year is built around the story of high returns to corn over the past several years, expected high returns to corn in 2012-13, both absolutely and relatively to other crops, along with continued strong U.S. and world use/demand.

As you can see on Table 1, for 2012-13, I am projecting a 2.1 million acre increase in corn planted acres to 94 million acres, which would be a new record. I am also projecting a 158.4 bushels per acre trend yield and 86.8 million acres to be harvested for grain. For a projected 2011 U.S. corn crop of 13,746 million bushels, this would be a record. Where do we get the extra acres for corn given I expected about the same number of soybean acres to be planted and two million more acres of wheat to be planted? We planted 315 acres to the principle crops last year, 1.7 million less than in 2010, much of that prevented plantings, 4.3 million less than 2009, and 10 million less than 2008. On top of that, 1-2 million acres of expired CRP ground will be available in addition, mostly for wheat. While returns for other crops are good as well, there appears to be the available land.

I am using a 1978-2011 trend yield to project the 158.4 bushels per acre yield used in my analysis. Others, including the USDA are using a shorter 1991-2011 trend yield of 161.3 bushels per acre. I have chosen the longer period for stability and while possible yields continue to increase due to technology and management gains, I am not convinced the long-term rate of increase has picked up as much as the shorter trend indicates. The shorter the period used to project the trend, the more a short burst in yield increases affects the annual projected increase in yields. This is not to say that the yield could not be significantly different than the trend yield, as seen on the downside in 2011 and 2010; and on the upside, if we adjusted the 160.4 bushels per acre yield we saw in the almost “perfect” growing weather year of 2004 by the trend yield increases, we would see a yield of about 173 bushels per acre.

I am also projecting record use, but do not expect use to grow as much as supply. I expect feed use to increase about 4% based on a larger crop, lower corn prices, about 2% lower beef production, and about 2% higher pork and poultry production over the 2012-13 corn marketing year. I expect FSI uses other than ethanol for fuel to stay relatively constant. I expect the growth in corn ethanol used for fuel to grow at a slow rate, about 100 million more bushels of corn for several reasons. We will be above the 2012 mandate, we can reach the 2015 mandate at that growth rate, and returns are likely to be okay, but not high. There are, of course, many of the same question marks as discussed for the 2011012 marketing year. An additional question will be the price of sugar. This could have a lot to do with Brazil coming back into the export market. And, if demand for gasoline keeps dropping, will we have blending walls?

I expect U.S. corn exports will return to a more “normal” level, 1,950 million bushels, given a “trend” world coarse grain crop and a continued growth in world demand. As shown in Table 1, this story would give us projected ending stocks of 1,332 million bushels, 10.0% of use, and an average price around $5.30, I think. It is not clear whether this scenario would increase the very tight world coarse grains stocks-to-use ratio. Back to that price volatility thing, any tighter stocks and prices will jump up quickly. On the other hand, a yield of 170 bushels per acre may solve the volatility “problem”. However, we may not like the more stable prices.

TABLE 1

SUPPLY/DEMAND BALANCE SHEET FOR CORN

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Est. 2010-2011	Proj. 2011-2012	Hilker 2012-2013
(Million Acres)											
Acres Planted	78.9	78.6	80.9	81.8	78.3	93.5	86.0	86.4	88.2	91.9	94.0
Acres Harvested	69.3	70.9	73.6	75.1	70.6	86.5	78.6	79.5	81.4	84.0	86.8
Yield/Bushels	129.3	142.2	160.4	148	149.1	150.7	153.9	164.7	152.8	147.2	158.4
(Million Bushels)											
Beginning Stocks	1596	1087	958	2114	1967	1304	1624	1673	1708	1128	846
Production	8967	10089	11807	11114	10531	13038	12092	13092	12447	12358	13746
Imports	14	14	11	9	12	20	14	8	28	15	15
Total Supply	10578	11190	12776	13237	12510	14362	13729	14774	14182	13501	14607
Use:											
Feed & Residual	5563	5798	6158	6155	5591	5913	5182	5125	4792	4600	4800
Food, Seed & Ind.	2340	2537	2686	2981	3490	4387	5025	5961	6428	6405	6525
Ethanol for fuel	996	1168	1323	1603	2119	3049	3709	4591	5021	5000	5100
Total Domestic	7903	8335	8844	9136	9081	10300	10207	11086	11220	11005	11325
Exports	1588	1897	1818	2134	2125	2437	1849	1980	1835	1650	1950
Total Use	9491	10232	10662	11270	11206	12737	12056	13066	13054	12655	13275
Ending Stocks	1087	958	2114	1967	1304	1624	1673	1708	1128	846	1332
Ending Stocks, %of Use	11.5	9.4	19.8	17.5	11.6	12.8	13.9	13.1	8.6	6.7	10.0
U.S. Loan Rate	$1.98	$1.98	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95	$1.95
U.S. Season Ave Farm Price, $/Bu.	$2.32	$2.42	$2.06	$2.00	$3.04	$4.20	$4.06	$3.55	$5.18	$6.20	$5.30

Source: USDA and Jim Hilker. (1 - 31 - 12)

WHEAT

The 2011-12 U.S wheat marketing year is eight months in, and while we will discuss the projections, it appears the present projection will hold for the most part. The more interesting part is discussing the 2012-13 prospects. While the wheat story differs significantly from corn in many ways, the volatility in wheat prices will be there, but largely due to corn.

2011-12

We planted 54.4 million acres of wheat for the 2011 wheat crop, up 800,000 acres million acres from 2010. Winter wheat accounted for 40.6 million of those acres, up 3.3 million acres. Spring wheat planted acres were down 1.3 million acres and durum wheat planted acres were down 1.2 million acres, out of only 2.56 to start with! Most of those decreases were related to planting conditions. Then came the growing season, the yields were terrible with lots of abandoned acres across the parched Great Plains, but there were pretty decent yields across much of the soft red wheat areas and western white wheat areas, however, spring and durum yields suffered some.

Harvested acres as a percent of planted acres were only 84%, after being almost 89% the previous year. A prime example, and the worst example, of what happened was Texas. Only 36% of the planted acres were harvested, versus 66% the previous year. And, the yield in Texas was only 26 bushels per acre versus the previous year's 34 bushels per acre, but on top of that you have to remember the yield is only calculated on harvested acres; all the zero yields on unharvested acres are not figured in. Texas planted 7% fewer wheat acres and harvested a 61% smaller crop. The final U.S. average yield came in at 43.7 bushels per acre, basically the longer-term trend yield, but 2.6 bushels per acre below the previous year's record yield. This is one of those cases where the average doesn't really tell the story.

Michigan planted 700,000 acres of wheat for 2011, up 170,000 acres from 2010, when late harvesting of soybeans cut wheat plantings. Michigan harvested 680,000 acres for grain, a bit higher percentage than normal. Michigan also recorded a record wheat yield, at 75 bushels per acre.

At 1,999 million bushels, the 2011-12 U.S. production was down 208 million bushels from the previous year. And, while beginning stocks were huge, they were smaller than the previous year. This put total supply down almost 300 million bushels.

Domestic use of wheat in the U.S. for 2011-12 is projected to be up 34 million bushels from 2010-11, with food use growing some with the population and feed and seed use up 24 million bushels. Exports are projected to decrease dramatically and have to this point in the marketing year. World wheat production jumped 40.0 MMT in 2011-12, to a record 691 MMT. The FSU-12's production went up from 81.4 MMT to 114.2 MMT. The exact opposite of the FSU-12's sharp decrease the year before. U.S. wheat exports are projected to be 950 million bushels, down 339 million bushels, 26.3%. Total 2011-12 U.S. wheat disappearance is projected to be 2,112 million bushels.

Projected 2011-12 U.S. ending stocks are projected to be 870 million bushels, 41.2% of use. The projected world stocks-to-use ratio is expected to be a more than sufficient 30.8%. Then what is holding up wheat prices? Yes I know they have dropped from their highs; it is called high corn prices. World wheat is being priced as a feed grain.

2012-13

The winter wheat seedings report showed 41.95 million acres of winter wheat were planted for the 2012, an increase of 1.3 million acres. Assuming spring and durum wheat acres return to more normal levels, I expect total wheat planted acres to be 57.7 million acres for 2012-13 as shown in Table 2. I am projecting a return to a more normal percent harvested, and am projecting harvested acres to be 49.1 million acres. Michigan planted 570,000 acres, down 130,000 from the 700,000 planted for the 2011 crop. The decrease was largely due to the higher return for alternative crops.

Using a trend yield of 44.2 bushels per acre, expected 2012 U.S. wheat production would be 2,168 million bushels, up about 170 million bushels. However, there will likely need to be an end to the drought conditions in the Great Plains to hit this level. And, at this point, there are significant odds that may not happen as the la Nina is still in place, although weaker. When added to similar beginning stocks to the previous year and expected imports, total 2012-13 supplies are expected to be 3,153 million bushels, up about 170 million bushels.

I expect domestic use to be up just a bit in 2012-13 from 2011-12. Food use may grow some with the population, and wheat for feed may grow some due to relative prices. I expect the world crop to be about the same level, but for use to be up some. Therefore I have raised my wheat exports to more normal levels.

This scenario would leave us with total ending stocks of 926 million bushels. The projected stocks-to-use ratio remains a fairly high 41.6%, about the same as this year. However, I expect the price to drop with lower feed grain prices.

TABLE 2

SUPPLY/DEMAND BALANCE SHEET FOR WHEAT

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Est. 2010-2011	Proj. 2011-2012	Hilker 2012-2013
(Million Acres)										
Acres Planted	62.1	59.7	57.2	57.3	60.5	63.2	59.2	53.6	54.4	57.7
Acres Harvested	53.1	50.0	50.1	46.8	51.0	55.7	49.9	47.6	45.7	49.1
Bu./Harvested Acre	44.2	43.2	42.0	38.6	40.2	44.9	44.5	46.3	43.7	44.2
(Million Bushels)										
Beginning Stocks	491	546	540	571	456	306	657	976	862	870
Production	2345	2158	2105	1808	2051	2499	2218	2207	1999	2168
Imports	68	71	82	122	113	127	119	97	120	115
Total Supply	2904	2775	2727	2501	2620	2932	2993	3279	2982	3153
Use:										
Food	907	910	915	938	948	927	919	926	935	945
Seed	80	78	78	82	88	78	69	71	82	82
Feed and Residual	212	182	160	117	16	255	150	132	145	170
Total Domestic	1194	1169	1152	1137	1051	1260	1138	1128	1162	1197
Exports	1159	1066	1003	908	1263	1015	879	1289	950	1030
Total Use	2353	2235	2155	2045	2314	2275	2018	2417	2112	2227
Ending Stocks	546	540	571	456	306	657	976	862	870	926
Ending Stocks, %of Use	23.2	24.2	26.5	22.3	13.2	28.9	48.3	35.7	41.2	41.6
U.S. Loan Rate	$2.80	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75	$2.75
U.S. Season Ave										
U.S. $/Bu.	$3.40	$3.40	$3.42	$4.26	$6.48	$6.78	$4.87	$5.70	$7.20	$6.80
Michigan $/Bu.	$3.35	$3.01	$3.13	$3.41	$5.01	$5.65	$4.00	$5.10	$6.50	$6.00

Source: USDA and Jim Hilker. (1 - 31 - 2012)

SOYBEANS

The projected soybean stocks-to-use ratios for both the U.S. and the world for both 2011-12 and 2012-13 are not expected to be tight. So why is the soybean price as high as it is, and why is it still volatile? My answer is twofold, South America is in the middle of their growing season, and Argentina's crop is being far from a sure thing, and due to planted acre needs, soybeans are tied to corn, and the world corn situation remains volatile due to continued projected tight corn stocks.

2011-12

U.S. soybean producers planted 75 million acres for their 2011 crop, down about 2.5 million acres from the previous two years. The decreased plantings were partially due to higher expected returns to corn and partially due to prevented plantings due to the wet spring. Harvested acres came in at 73.6 million acres; the 1.4 million acres not harvested is on the high side, the norm is closer to a million acres or less. The increase in abandoned acres was mostly a combination of being too wet right after planting and/or too dry later in the season.

U.S. 2011 soybean yields averaged 41.5 bushels per acre, about 2.2 bushels per acre below the expected trend yield. It was a rough growing year for various reasons over much of the U.S.. U.S. 2011 production was 3,056 million bushels, down 300 million bushels from the record 2009 levels, and down 273 from 2010 as both harvested acres and yields were down. Total soybean supply for the 2011-12 marketing year is projected to be 3,285 million bushels as shown in Table 3.

Michigan planted 1.95 million acres of soybeans in 2011, down 100,000 acres from 2010, and harvested 1.94 million acres, also down 100,000 acres. Michigan's 2011average yield was 44 bushels per acre, up a half bushel from the previous year, but 2 bushels per acre below the 2006 record Michigan soybean yield of 46 bushels per acre.

On the use side, crush is expected to be 1,615 million bushels, down 33 million bushels from the 2010-11 soybean marketing year. South America continues to dominate the world soybean meal and soybean oil markets with their two big crops in a row, and perhaps a third one on the way.

U.S. 2011-12 soybean exports are expected to drop 225 million bushels, 6 MMT. The decrease is partially due to our smaller supply, and partially due to the competition from South America after they've had two large crops in a row and are looking at a third large crop being harvested this spring. While world use is expected to keep growing, Brazil is expected to not only pick but the growth, but pick up some extra as well. Argentina had a record crop in 2009-10, but dropped off significantly due to a drought in 2010-11, and appears that they will be closer to 2010-11 this year than 2009-10. While Brazil had a record crop in 2009-10, they had a much larger record crop in 2010-11, and are looking at nearly as big a crop this year.

Projected 2011-12 U.S. ending stocks are 275 million bushels, a very adequate 9.1% of use. Projected world stocks are also adequate. So, why are soybean prices still relatively high? While they are not high relative to corn, they are high relative to costs and stocks. Again, the only explanations I can deduce, are the usual production unknowns, and the tie to corn.

2012-13

Planted soybean acreage for 2012 is expected to be about the same as 2011. While projected returns to corn are higher than soybeans, the expected returns to soybeans are still very good. And, while the expected returns to soybeans versus continuous corn are also lower, the difference is not huge, and is it worth the risk to have too much continuous corn? There are also reports that continuous corn is having some bug and weed issues, such as resistant corn rootworms and weeds resistant to roundup in some areas. This will likely help keep soybean acres from dropping.

The 2012 expected U.S. trend yield for soybeans is 43.9 bushels per acre. Projected harvested acres are 73.7 million. Multiplying the trend yield times projected harvested acres gives us projected production of 3,235 million bushels, up 179 million bushels. And, given the 60 million bushel larger carry-in, total 2012-13 projected supplies are up 240 million bushels as shown in Table 3.

I expect crush to return to 2010-11 levels with the larger crop and increased demand. I expect exports to increase in 2012-13 to 1,430 million bushels as we become more competitive and world demand continues to grow. All in all, I am projecting total 2012-13 use at 3,228 million bushels, a 217 million bushel increase, but not enough to match the 240 million bushel increase in supply. This means projected ending stocks will grow to 297 million bushels, 9.2% of use. This will lead to a lower average U.S. price, given a normal South American crop.

TABLE 3

SUPPLY/DEMAND BALANCE SHEET FOR SOYBEANS

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Est. 2010-2011	Proj. 2011-2012	Hilker 2012-2013
(Million Acres)											
Acres Planted	74	73.4	75.2	72	75.5	64.7	75.7	77.5	77.4	75.0	74.9
Acres Harvested	72.5	72.3	74.0	71.3	74.6	64.1	74.7	76.4	76.6	73.6	73.7
Yield/Bushels	38.0	33.9	42.2	43.0	42.9	41.7	39.7	44.0	43.5	41.5	43.9
(Million Bushels)											
Beginning Stocks	208	178	112	256	449	574	205	138	151	215	275
Production	2756	2454	3124	3063	3197	2677	2967	3359	3329	3056	3235
Imports	5	6	6	3	9	10	13	15	14	15	15
Total Supply	2969	2638	3242	3322	3656	3261	3185	3512	3495	3285	3525
Use:											
Crushings	1615	1530	1696	1739	1808	1803	1662	1752	1648	1615	1655
Exports	1045	885	1097	940	1116	1159	1279	1499	1501	1275	1430
Seed	89	92	88	93	80	93	90	90	87	88	88
Residual	41	19	105	101	77	0	16	20	43	32	55
Total Use	2791	2526	2986	2873	3081	3056	3047	3361	3280	3011	3228
Ending Stocks	178	112	256	449	574	205	138	151	215	275	297
Ending Stocks, %of Use	6.4	4.4	8.6	15.6	18.6	6.7	4.5	4.5	6.6	9.1	9.2
U.S. Loan Rate	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00	$5.00
U.S. Season Ave Farm Price, $/Bu.	$5.53	$7.34	$5.74	$5.66	$6.43	$10.10	$9.97	$9.59	$11.30	$11.70	$11.00

Source: USDA and Jim Hilker. (1 - 31 - 12)

2012 ANNUAL LIVESTOCK OUTLOOK
Jim Hilker

CATTLE

Feedlots had a tough 2011. However, after three profitable months, feedlots returned to monthly losses for the remainder of the year, albeit not as bad as 2008 and 2009, but worse than 2010 where feedlots were close to break-even. January 2012 appears to have been near break-even. The returns discussed above are full costs and are calculated assuming feed is bought monthly and all feed is bought versus grown by the cattle feedlot. Michigan cattle feeders who grew much of their own feed, of which many do, and had near average yields or better, probably cash flowed pretty well in 2011 and had accounting profits, i.e., taxes to pay. However, it is a lot easier to sell high priced corn than feed cattle.

As we look to the remainder of 2012, economic profits for feedlots will be hard to come by. Due to less feeders being available this year than last, i.e., high prices as discussed below and continued overcapacity of feedlots and packers, margins for both will remain very tight.

Cow calf returns were positive for a second year in a row in 2011, after being negative in 2008 and 2009. However, the returns varied tremendously as you might guess. In the drought stricken cow calf areas of the High Plains, the losses were huge and liquidation of all or parts of many herds was rampant. Where they had grass and hay across the more northern cow calf regions, profits were large. Large profits are expected in 2012, but you will still need grass, and it is not clear if the drought in the High Plains is over.

The January 1, 2012, Cattle Inventory Report reported the U.S. had 90.8 million head of cattle and calves as of January 1, 2% below a year ago, and the smallest since the 1950's. USDA estimated the total U.S. cow herd, including dairy, at 39.1 million head, 2.2% smaller than a year ago. The beef cow herd was estimated at 29.88 million head, a whopping 3.1% smaller than a year ago. When you don't have grass/hay/feed, you sell cows. Beef cow numbers were down 13% in Texas and 14% in Oklahoma. While Texas remained the largest beef cow state, Oklahoma fell from second to fourth.

Beef cow replacements on January 1, 2011, were 5.2 million, up a marginal 1.4%. This increase is only two-tenths of the beef cow herd. It is hard for me to see a real increase in the size of the beef cow herd next January 1. As mentioned, the drought may not be over, and heifer and cull cow prices remain very high, and tempting. We would be lucky to hold even. Cow slaughter remained high across the South in January.

USDA reported the 2011 calf crop at 35.3 million head, 1.1% smaller than 2010, the smallest calf crop since 1950. As of January 1, the calculated available supply of feeder cattle outside feedlots was 25.74 million head, 4% from last year. Cattle on feed January 1 were 14.0 million head, up 0.8% relative to last January 1.

All cattle and calves in Michigan on January 1 were at 1,110,000 head, up 1.8% from previous year. All cows that had calved were at 480,000 head, up 4.3%. Beef cows were up 10.1%, at 109,000. Dairy cow numbers were put at 371,000, up 2.8%. Beef cow replacements were even at 27,000, while dairy cow replacements were up 6.8% at 158,000 head. Michigan's 2010 calf crop was 390,000, up 5.9% from the previous year. The survey does not distinguish

between beef and dairy calves. Michigan had 150,000 cattle on feed January 1, down 11.8% from last year.

The following estimates are made in conjunction with the Livestock Marketing Information Center, which I belong to, it is a group supported by Universities to provide efficiencies, i.e., less duplication of work by folks such as myself. U.S. beef production is expected to be down 3.9% for 2012, as slaughter is expected to be down 5.2% with dressed weights being up 1.4%. Steer prices are expected to average in the $123-127 per cwt. range for all of 2012, after averaging $114.74 for 2011. The 700-800# feeder steers are expected to average $144-150 per cwt. in 2012, up from $135.04, with 500-600# feeder calves averaging $156-164 per cwt., versus $148.37 in 2010.

In the first quarter of 2012, beef production is expected to be down 3%. Steer prices are expected to average $122-124, with feeder steers averaging $144-147, and feeder calves averaging $157-162. In the second quarter, production is expected to be down 3.8%, with steer prices averaging $125-128, feeder steers averaging $145-149, and feeder calves averaging $158-164. In the third quarter, production is expected to be down 5.2%, with steer prices averaging $122-126, feeder steers averaging $146-152, and feeder calves averaging $157-165. In the fourth quarter, production is expected to be down 3.7%, with steer prices averaging $143-150, feeder steers averaging $118-125, and feeder calves averaging $153-163.

HOGS

Farrow-to-finish hog operations had a mixed year in 2012 with regards to profits, as they did in 2010, after taking a beating in 2009 and 2008. Most of the losses have occurred the past few months. I expect the same kind of profit picture this year, mixed. Pork production was up 1.4%, but per capita consumption of pork was down 4% in 2011 versus 2010. Per capita consumption was down despite the increase in production due to pork exports being up 21%. Pork exports equaled 22.4% of 2011 production.

All hogs and pigs on December 1, 2011, were 102% of December 1, 2010. The breeding herd was even with December 1, 2010. Hogs kept for marketing, were up 2%. The number of market hogs weighing 180 pounds or more on December 1 was even compared to 12 months earlier. The 120-179 pound group was up 2%; the 50-119 pound inventory was up 2%; and the inventory of pigs weighing less than 50 pounds was up 2.0% compared to a year earlier.

The fall September-November farrowings, this spring's production, were even, but the fall pig crop was up 1.4%, as pigs per litter were up 1.94%. The continued climb in pigs saved per litter is remarkable. December-February winter farrowing intentions, next summer's production, were up 1% and March-May farrowing intentions, next fall's production, were down 1%. If we continue to climb in pigs saved per litter, we may not see as much of a cutback in production.

The Michigan breeding herd stayed even at 110,000 head, relative to December 1, 2010 and 2009. Our hogs kept for market, at 930,000 head, were also even with last year, putting our total numbers even with the previous year. Pigs saved per litter for Michigan were up to 9.95 from 9.82, 1.3%.

Pork production is expected to be up 1.3% in 2012 as slaughter is expected to be up 1.1% with weights being down a bit. Carcass prices, National Weighted Average Base (multiply

by .76 to have live price projections) are expected to average in the $86-92 per cwt. range for all of 2012, up 3.5% relative to 2011. This price assumes the USDA's projected exports occur, hold steady after last year's huge increase, and domestic demand levels off to strengthens a bit.

In the first quarter of 2012, pork production is expected to be up 1.3%, with carcass prices averaging $83-88 per cwt., up 9.1%. In the second quarter, production is expected to be up 1.3%, with carcass prices averaging $89-95 per cwt., up 2.8%. In the third quarter, production is expected to be down 0.4%, with carcass prices averaging $91-97, up 1.4%. In the fourth quarter, production is expected to be up 2.9%, with carcass prices averaging $82-89, up 0.6%.

2012 DAIRY SITUATION AND OUTLOOK
Christopher Wolf

The U.S. All Milk price averaged $20.14 per cwt. in 2011, which is the highest on record—unadjusted for inflation—the previous high was $19.13 per cwt. in 2007. High feed prices took a large share of the milk revenues in 2011.

Milk cows on U.S. dairy farms increased to 9.221 million in December 2011, cows up 80,000 cows over a year earlier (Figure 1). That number is still more than 110,000 cows below the peak in 2008, but milk cow numbers certainly picked up steam in 2011. Milk per cow averaged 21,335 pounds for a total of 196 billion pounds of milk produced nationally in 2011. That total milk production was a 1.8% increase over 2010.

In December 2011, milk production was up in all but four of the top 23 milk producing states. In Michigan, there were 370,000 milk cows in December, up 9,000 from the previous year. Milk production was up 4.2% from December 2010 due to the additional cows and a 30 pound per cow increase in milk. California milk production was up 3.8% over the previous December, while Wisconsin was up 2.6%.

The latest cattle report indicates that dairy replacement heifer numbers totaled 4.527 million on January 1, 2012. That value is 41,000 fewer than a year earlier. Of that number, 3.029 million are expected to calve this year. This may indicate less growth in milk production this year, but milk per cow increases could more than make up for this apparent decline in heifer numbers.

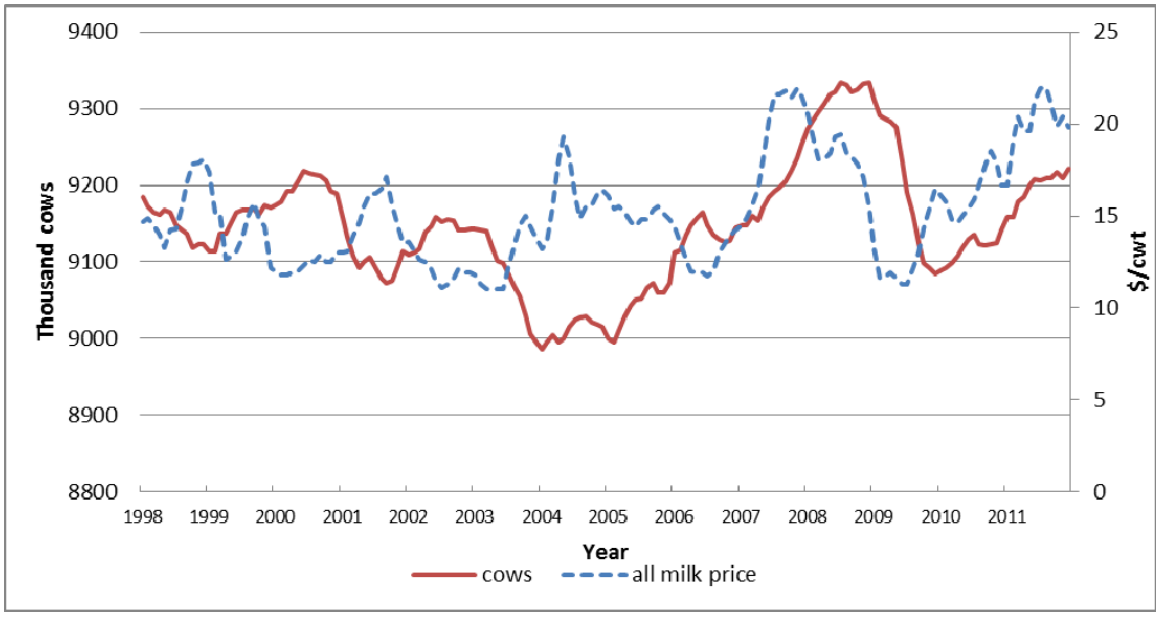


Figure 1. U.S. milk cows and all milk price, monthly 1998-2011

The Consumer Price Index for dairy products set an all-time record in 2011, averaging 212.75 (1982-84=100). This broke the previous record set in 2008 and is dampening demand for dairy products domestically. Natural cheddar cheese price was over $5 per pound in every month of 2011, with processed cheese prices over $4 per pound. Meanwhile, wholesale cash cheese prices averaged approximately $1.80 per pound in 2011.

The U.S. continues to increase its share of world dairy exports. Through November 2011, U.S. dairy exports totaled 13.3% of total milk solids produced. The total value of these exports was $4.4 billion, a 31% increase over 2010. The largest importers of U.S. dairy products were Mexico, Southeast Asia, Canada, the Middle East, China, Japan, and South Korea. Milk powder and whey proteins were the largest exported products measured by volume.

Current Futures Markets and MI Price

Currently, the Class III futures contract averages right on $17 per cwt. for 2012. The long-run (10-year) average basis (mailbox milk price – Class III milk price) for Michigan is about $1 per cwt., but the basis has been quite a bit healthier than that in the past couple of years. From 2009 through 2011, the basis in Michigan averaged $1.67 per cwt. due to strong producer price differentials and cooperative over-order premiums. For example, recent over-order premiums have exceeded $3 per cwt. Figure 2 displays the monthly Michigan milk basis from 2000 through October 2011. The large declines—and sometimes negative basis—are due to large (and sudden) increases in the Class III price which leads to a negative producer price differential. With the more recent average basis value, the futures market is predicting a Michigan mailbox price to average in the neighborhood of $18.70 per cwt. for 2012. Recall that a year ago the Class III futures were sitting in the same neighborhood for 2011 before the price took off due to feed price increases; so there definitely exists potential for volatility.

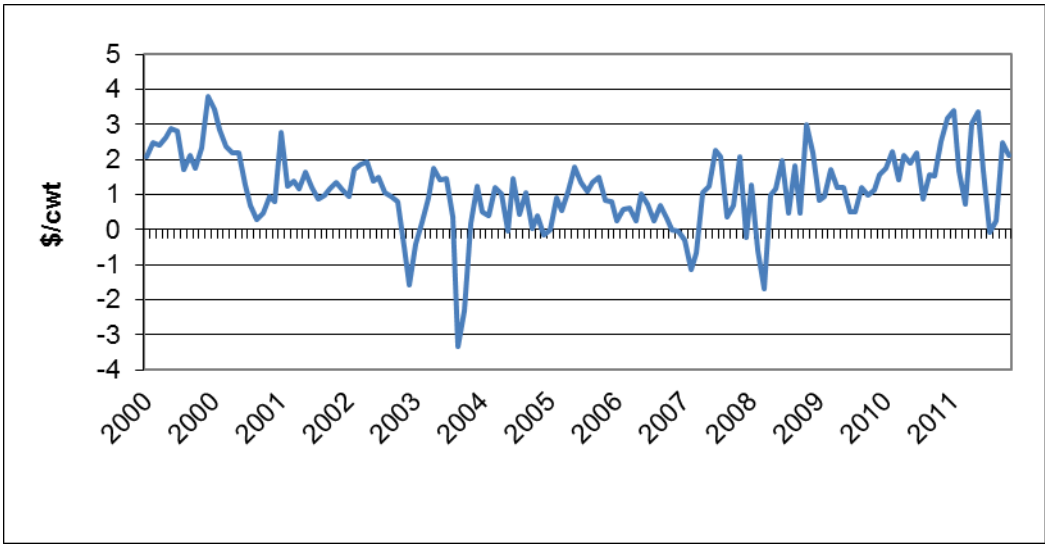


Figure 2. Michigan milk basis, monthly January 2000-October 2011

Three Year Milk Price Cycle?

It seems to have become accepted conventional wisdom that the U.S. farm milk price operates on a three-year cycle. This notion appears to be based on the past 15 years or so. Consider Figure 3. The most recent complete cycle would be the high prices in 2007 and early 2008, with the low being in 2009. A similar pattern can be seen in other years.

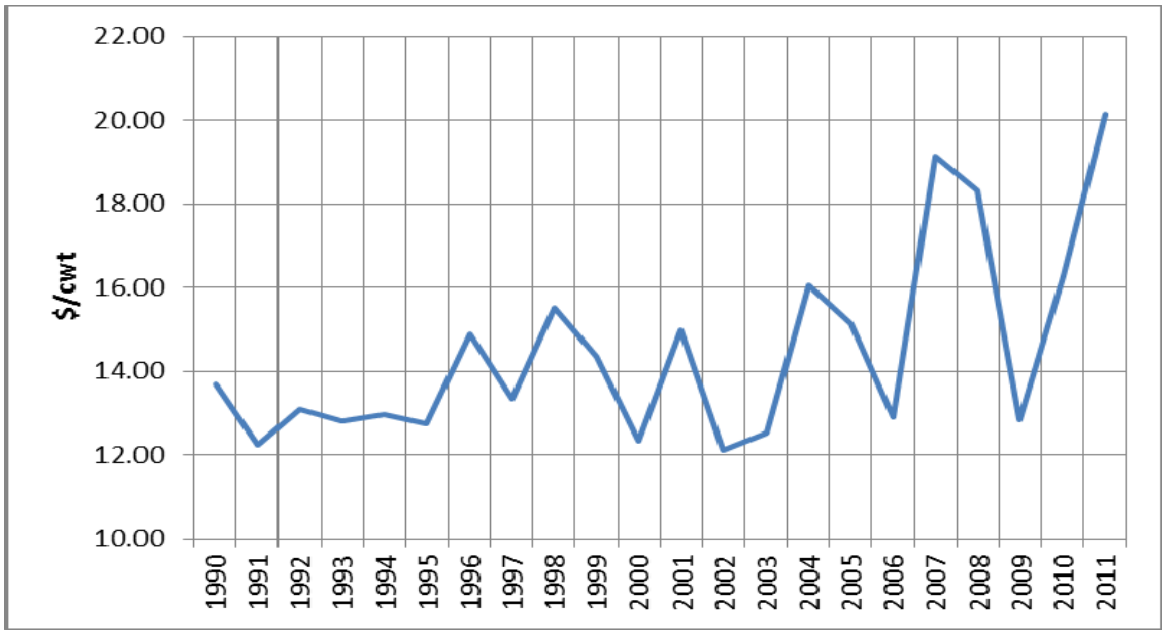


Figure 3. U.S. all milk price, annual average 1990-2011

The three-year cycle also has some potential foundation in the typical reproduction schedule for dairy cows. With heifers expected to reach first calving around two years of age and a nine-month gestation, new waves of heifers can reach milk production age three years after high milk prices. For example, high prices in 2011 may lead to a glut of expansion and new heifers that will depress milk prices in 2013 (or 2014) leading to large-scale culling and the cycle repeats. This explanation offers support for a potential three-year cycle in milk supply, but does not speak to the demand side. The most recent collapse in milk prices was caused by a collapse in world-wide demand as the global recession occurred. This was unlike the price collapses in 2000, 2002, and 2006 which were driven by domestic milk supply out-stripping domestic demand. Thus, with the increasingly global dairy market, there is reason to be skeptical that 2012 will witness a down cycle in milk price unless significant demand shocks occur (which are entirely possible given the EU and other economic situations).

A Related Factor to Watch

There are many factors that bear watching relative to milk price in 2012. One to watch is that quality hay is very expensive nation-wide at the current time. Hay stocks in almost every state are substantially lower than a year ago and prices for dairy hay have climbed to historic highs in some locations. The drought in Texas has resulted in a great deal of hay flowing south and west from the Upper Midwest and Northeast. La Nina, a climate event caused by a colder than normal currents in the Pacific Ocean, was blamed for the drought in the southwest U.S., as well as severe weather in Oceania. Recent weather forecasts indicate that another La Nina current may be forming again this year. The weather and planting decisions will be important factors with respect to hay prices (and other feed prices) in the second half of 2012.

TAXES
Larry Borton

Farms are in the middle of a period with generally higher farm income, and farmers are interested in tax planning to reduce their income and self-employment taxes. Most of the federal tax rules that affect farmers remain consistent from 2011 to 2012. Congress and the administration cooperated in December of 2010 to pass legislation to make rules predictable until after the November 2012 elections. This shows that cooperation between the parties may occur. However, some laws expired or changed at the end of 2011 which may increase taxable income and rates in 2012. The federal legislation still often changes important items just one year (or less) at a time. These changes often aren't passed until late in the year. Farmers and tax preparers still want to use all the rules to not overpay taxes, but longer-term planning is challenging when it is not known how the rules will change. The Michigan rules for 2012 were also changed in the law that was passed in the middle of 2011. While the final tax forms and instructions for these state changes won't be available until January 2013, it is possible to plan for these changes.

A few adjustments are still allowed to be made for 2011 taxes until the return is filed or until the due date of the return. This includes both depreciation and some retirement contributions. Depreciation choices include bonus depreciation, direct expensing (section 179), and regular depreciation. The 100% bonus or special depreciation is available for qualified items purchased in 2011 and prior to January 1, 2012. Qualified items purchased in 2012 will be eligible for 50% bonus. This bonus must be taken unless an election by class life is made to not use it and applies to virtually all original use, farm property which has a life of 20 years or less. This is not available to fruit and vine producers who have elected out of the uniform capitalization rules and are required to use the Alternate Depreciation System (straight line, longer life). A farmer who elects to use ADS as an option may still use bonus depreciation. Under current law, the bonus depreciation disappears for calendar year 2013.

The section 179 direct expensing limit is $500,000 of qualified property placed into service in 2011. Phase-out begins at $2,000,000 of qualified property purchased. This differs from bonus in that used, qualified property is also eligible. It doesn't have to be original use and any amount of the boot or cash spent on the purchase may be elected from $1 up to the maximum. This is reduced for 2012 to $139,000 with phase-out starting at $560,000. Under current law direct expensing decreases to $25,000 in 2013.

Of course, regular depreciation is available after direct expensing and bonus depreciation using either 150% declining balance or straight line. Straight line depreciation can use the normal class life years or the longer years used for the Alternate Depreciation System. Contributions to Individual Retirement Accounts (IRA) may be deductible for up to $5,000 or $6,000 if 50 years or older; double these amounts for a married couple. These won't reduce self-employment tax, but traditional IRAs will reduce federal and state income taxes.

Some of our tax planning tools essentially remain constant for 2012. These include prepaying expenses, deferring income, the domestic production activities deduction, and income averaging. For cash basis taxpayers, including most farmers, expenses count for income taxes when the check is written and sent. This allows purchase of supplies like seed and fertilizer in the year prior to planting. Similarly, incomes count for income taxes when the check is received. Exercise caution when using these because a deposit on a purchase does not count as an expense for tax purposes. Indications of a deposit include not specifying a

quantity in the purchase and not specifying exactly what is purchased. There also must be a business purpose for the purchase such as assuring a supply or receiving a discount for an early purchase. Delaying crop sales until the following tax year works well for cash basis farmers to defer income. A problem may occur if the sale occurs one year but the payment is not received until the next year. The principle of constructive receipt requires income to be counted when a taxpayer has the right to receive it. Simply asking someone to hold a check or just not cashing it until next year would violate this principle, so it would be counted as income in the prior year rather than the later year.

The Domestic Production Activities Deduction (DPAD) is an adjustment to income on the front of Form 1040 that reduces income taxes, but does not affect Self-Employment (SE) tax. It is the lesser of three items: 9% of Qualified Production Activities Income (QPAI), 9% of modified Adjusted Gross Income (AGI), or 50% of W-2 wages paid to employees for producing QPAI. QPAI is roughly approximated by adding net Schedule F income to sales of raised breeding livestock. Many cooperatives also allocate a DPAD which can be used even if a farmer has no DPAD without the co-op. Although the calculations may be complicated, this can be worthwhile to use.

Finally, the Income Averaging provision for farmers (Schedule J) allows marginal tax brackets (0%, 10%, 15%, 25%, and so on) to be borrowed from the three previous tax years. This results in tax savings beyond what might be expected if there are interactions with the long-term capital gain rates. These rates are 0% and 15% for 2011 and 2012, but increase to 10% and 20% in 2013 under current law.

Michigan income tax law has changed for 2012. Most of the news stories have centered on the pension benefits that may not be exempted for this year, and the withholding that is required for this year. Other provisions may affect farmers more than the taxed pension benefits. While the Farmland Open Space and Preservation Act credits did not change, the Homestead Property Tax Credit will probably disappear for many farmers that may have qualified for it in 2011. New limits for the Homestead credit include a lower phase-out beginning at $41,000 total household resources, and completely gone by $50,000. It is only available for homes with a taxable value less than $135,000. Another change follows because agricultural production was exempted from the previous business taxes called the Single Business Tax and the Michigan Business Tax. The new Corporate Income Tax (CIT) does not apply to sole proprietorships, partnerships or S Corporations. It does apply to all C Corporations so a farm that is a C Corporation is subject to the CIT.

An important, but temporary provision, raised the 2011 estate tax exclusion amount to $5 million per person or $10 million per couple with an increased or step-up in basis of inherited property to fair market value. This exemption was indexed for inflation so it became $5,120,000 for 2012. Under current law it decreases to $1 million in 2013.

The SE tax for 2011 was reduced from 15.3% to 13.3%, and extended at that rate for the first two months of 2012. Congress will likely deal with this soon for the remainder of 2012. Making changes one year at a time is not good from a tax planning or business planning point of view, let alone making changes for just two months.

Expect many changes for 2013. Current law has numerous tax provisions expiring at the end of 2012. Congress and the administration may make adjustments at the end of this year. In

the longer run we have large federal deficits that may require reduced spending or increased revenue. Increased revenue does not necessarily mean higher marginal rates, but that is likely.

If rates increase in the future, then 2012 may be a good year to get income through the tax system. Under current law, the 10% bracket disappears in 2013, the highest rates increase for normal income, and the long-term capital gains rates increase.

FARM INCOME
David B. Schweikhardt

As in recent years, uncertainty about the outlook for farm income in 2012 will be determined by factors outside the agricultural sector. Continuation of the slow recovery from the 2007 credit crisis, slow economic growth in the U.S. and other developed countries, and instability in global oil markets are likely to be the most significant determinants of the farm income picture in 2012. Variations in outlook across agricultural sectors (e.g., livestock versus crop sectors) could continue in 2012.

For calendar year 2011, net farm income in the U.S. is estimated to have been $101 billion, compared to $79 billion in 2010, and the prior record level of $84.7 billion in 2008. The 2011 level of farm income was well above the 10-year average figure of $67.4 billion. The increase in net farm income was due primarily to an increase in the value of crop production ($31.9 billion increase) and an increase in the value of livestock production ($23.3 billion). These increases in revenue offset increases in the cost of livestock feeds ($10.1 billion increase), seed ($1.1 billion increase), fertilizer and lime ($5.8 billion increase), petroleum fuel and oils ($3.5 billion increase), land rent ($1.5 billion increase), and interest expense ($1.0 billion increase).

While total net farm income appears to be headed toward a similar level in 2012, four factors will continue to drive the uncertainty in this outlook. First, significant uncertainty about energy costs and petroleum-based chemical costs will continue in 2012. Second, though the one-year outlook for interest rates is likely to be favorable, a longer-term view of interest rate risk may be needed. Third, given farm income levels in recent years, combined with the short-term outlook for farm income, rising farmland rental rates are likely to continue, thereby passing an increased portion of the gains in farm income to non-farm landlords. Finally, the aggregate farm income numbers discussed above can obscure the divergent conditions that could prevail across the farm sector in 2012. Each of these factors will require closer scrutiny as 2012 unfolds.

The first factor, energy costs, includes both natural gas and oil. The futures price for natural gas was $3.10 per cubic foot on December 19, 2011, compared to $4.04 on the same date in 2010. This also compares to a price of nearly $13 at its peak in 2008. This price outlook is largely the result of a significant increase in the production of shale gas, which is unlikely to change in the near future. Thus, the outlook for fertilizer prices is likely to remain steady in 2012 (see the input cost outlook article in this issue for more detail).

Producers purchased $16.7 billion in fuels during 2011, an increase of $3.5 billion over 2010. The U.S. Department of Energy is projecting that crude oil prices will average $103 per barrel in 2012, compared to $101 in 2011. This oil price would translate to an on-highway diesel fuel price of $3.81-3.87 per gallon throughout the year. The continued instability and uncertainty of oil prices is likely to continue in 2012 as numerous events pose the threat of continued instability in oil markets. First, events in the Middle East are likely to continue to create periods of instability in oil prices. Second, the uncertainty regarding a potential recession, especially in Europe, is likely to affect the demand for oil. Finally, uncertainty about the Chinese economy, and whether it will continue the income growth of recent years, will also affect oil prices. Thus, producers should expect continued instability throughout the year.

The second factor, interest rates on production and asset loans, will continue to be determined by the highly unusual macroeconomic environment that exists at this time. The Federal Reserve announced its intention to extend its near-zero policy on its Federal Funds lending rate beyond 2012. Thus, the immediate risk of increases in interest rates seems minimal. On the other hand, it is unlikely that interest rates will fall significantly below existing levels. It must be noted, however, that two items should be considered in 2012. First, lenders are likely to continue with increased scrutiny of borrowers' creditworthiness. As noted last year in this article, there is no such thing as an "agricultural credit market" that stands separate from the remainder of the international credit market. If investors are nervous about lending money, even because of events outside the agricultural sector (e.g., Lehman Brothers, MF Global, Bernard Madoff, etc.), then investors will demand more proof of creditworthiness, and neither lenders nor borrowers will be able to resist those demands. Thus, no matter how "healthy" the agricultural sector is at this time, the sector's health will not satisfy the demands of nervous investors whose trust in the financial system has been seriously eroded.

The existing situation for interest rates does provide an opportunity for borrowers to conduct an additional assessment of their longer-term interest rate risk. At some point, the Federal Reserve will increase the Federal Funds rate. When that occurs, what level of interest rate risk will a producer face? Assuming "worst case" scenarios of either a rapid increase in rates or even significant restrictions in the availability of credit, what are the operation's financial viability and financing options? One thing remains clear: The world is in a macroeconomic situation that may be unprecedented. Despite much rhetoric, this is not "just like the 1970s" or "just like the 1930s." The initial crisis and the monetary policy reaction to the crisis place the economy in uncharted territory, probably for the remainder of this decade. The greatest challenge is not an inflationary scenario, and not a deflationary scenario, it is a rapidly changing scenario that requires managers to respond to scenarios at both ends of the spectrum. Only worst case scenario planning for low probability events can provide information in advance of such events.

Third, land rental costs are likely to continue their significant increase in 2012. Farmers paid $14.1 billion in land rents to non-operator landlords in 2011, an increase of $1.5 billion, or 12% higher, than the 2010 level. This increase is to be expected, given relatively high level of commodity prices and crop income during the 2007 to 2011 period. There seems to be little reason to believe that this trend will not continue in 2012. Whether such land rents can be sustained in the future will depend on the longer-term trend in farm income and on macroeconomic policies that determine the direction of interest rates.

Finally, in recent years the aggregate farm income outlook has often obscured a highly variable situation across agricultural producers. In particular, such aggregate numbers can hide differences in outlook across the crop and livestock industries. In recent years, this differing income outlook for the crop and livestock sectors was determined by the impact of high feed grain and oilseed prices. Crop producers benefited from high commodity prices, driven in part by the high price of oil and its impact on ethanol production, while livestock producers can be confronted by these same high prices as a significant increase in the cost of livestock or dairy production. For example, livestock and dairy producers paid $55.7 billion for purchased feed in 2011, compared to $45 billion in 2010 and a 10-year average of $34.6 billion spent on feed expenses. As producers enter 2012, the outlook for grain and oilseed prices will be critical in determining the feed cost level paid by livestock producers. The outcome of the crop supply/demand balance will determine if the income outlook for crop and livestock producers diverges once again.